

## ABSTRACT

A radio frequency receiver includes an amplifier and a detector that produces a bias control signal indicating the level of the signal environment in which the receiver is currently operating. A bias generator sets the bias level of the amplifier according to  
5 the bias control signal, where the bias level tends to increase as the signal level increases. Further, the receiver, includes a first circuit adapted to receive a radio frequency input signal, the circuit having an adjustable bias level, a bias control having more than one level of control for generating a bias control signal based upon a base-band signal for controlling the first circuit and generating an output signal; and an alternative bypass  
10 switch across the first circuit so as to send a DC signal corresponding to the total power generated by said feedback means.